

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-077052

(43)Date of publication of application : 15.03.2002

(51)Int.Cl. H04B 10/02  
 H04B 10/18  
 G02F 1/365  
 H04J 14/00  
 H04J 14/02

(21)Application number : 2000-264757

(71)Applicant : FUJITSU LTD

(22)Date of filing : 01.09.2000

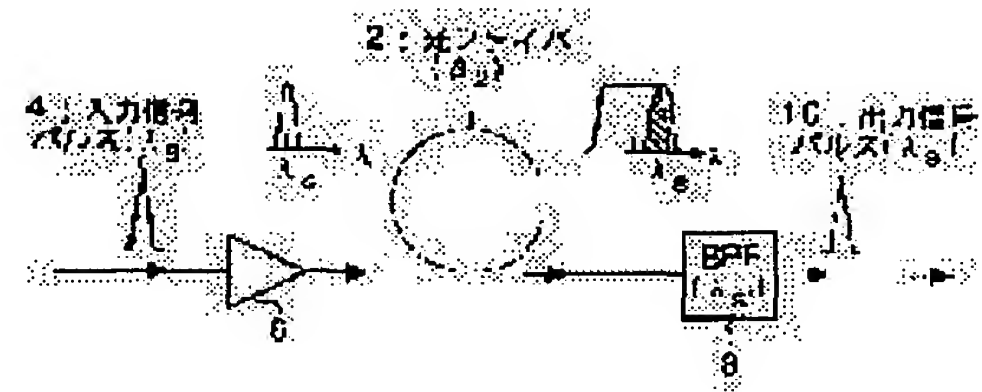
(72)Inventor : WATANABE SHIGEKI  
 FUTAMI FUMIO

## (54) METHOD, DEVICE AND SYSTEM FOR PROCESSING OPTICAL SIGNAL

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide a processing method for an optical signal suitable for the WDM (wavelength division multiplex) that is independent of a bit rate of an optical signal and a pulse shape or the like with respect to a method, a device and a system for processing an optical signal as a major task.

SOLUTION: This invention provides the method for processing an optical signal. When an optical signal is received by an optical waveguide structure providing a nonlinear effect, the nonlinear effect causes chirping to the optical signal. By supplying an output optical signal outputted from the optical waveguide structure to an optical band pass filter, components other than a component with small chirping are extracted. The optical band pass filter has a pass band including wavelengths different from the wavelength of the optical signal. By extracting components other than the component with small chirping intensity fluctuations and accumulated noises are eliminated from the top part and/or the low power part of pulses.



## LEGAL STATUS

[Date of request for examination] 12.07.2001

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision  
of rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office